UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rev. 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 12/12/2008

TITLE OF INVENTION: METHOD OF PROCESSING AN ORGANIC-FILM

Smith, Gambrell & Russell 1850 M Street, N.W., Suite 800 Washington, DC 20036 EXAMINER

SELLMAN, CACHET I

ART UNIT PAPER NUMBER

1792 DATE MAILED: 12/12/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,038	12/04/2003	Kazuyuki Mitsuoka	33082M185	4856

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/12/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE IEEE and PUBLICATION IEEE (if required). Blocks 1 through 5 should be completed where accordance A BL further correspondence including the Issuer advances, orders and notification of intensary forces will be mysled to the current correspondence including the Issuer advances, orders and notification of intensary forces will be mysled to the current correspondence including the Issuer advances, orders and notification of intensary forces will be mysled to the current correspondence including advances.

indicated unless correct maintenance fee notifica	ed below or directed of	herwise in Block 1, by (a) specifying a new corre	spondence address	and/or (b) indi	cating a separ	ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
		2/2008		Ces	tificate of Maili	ng or Transm	ission
Smith, Gambre 1850 M Street, I Washington, DC	N.W., Suite 800		I he Sta add trar	reby certify that the les Postal Service versed to the Mai smitted to the USP	is Fee(s) Transn vith sufficient po l Stop ISSUE F TO (57I) 273-28	nittal is being ostage for first EE address a 885, on the da	deposited with the United class mail in an envelope bove, or being facsimile e indicated below.
							(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DO	CKET NO.	CONFIRMATION NO.
10/727,038	12/04/2003	•	Kazuyuki Mitsuoka		33082M	1185	4856
		SSING AN ORGANIC-I		I many ny many	over I money		D. TERRE
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU		FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0 1		\$1810	03/12/2009
EXAM		ART UNIT	CLASS-SUBCLASS	J			
SELLMAN. 1. Change of correspond			427-566000 2. For printing on the page 2.				
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTOVS91/22) attached. The Address' indication (or "Fee Address' Indication form PTOVS1847; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to 3 registered patent attorneys cagents OR, alternatively, (2) the name of a single firm thaving as a member a registered nature, or 4 agents of the names of up to 2 registered patent attorneys or agents and the names of up to 1 street, no name with per printed.				
PLEASE NOTE: Un recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	THE PATENT (print or ty data will appear on the p T a substitute for filing an (B) RESIDENCE: (CIT'	natent. If an assign assignment. and STATE OR (COUNTRY)		
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual 🚨 C	orporation or oth	er private grou	p entity Government
Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			A. Payment of Fee(f): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby suthorized to charge the required fee(f), any deficiency, or credit any overpayment, to Depoid Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY stati		☐ b. Applicant is no lor	oer claiming SMA	I.I. ENTITY star	us Sec 37 CF1	R 1 27(e)(2)
			d from anyone other than Office.				
interest as snown by the	records of the Clined Sta	nes ratent and Trademar	Onice.				
Authorized Signature				Date			
Typed or printed name				Registration !			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DO k13-1450.	CFR 1.311. The information U.S.C. 122 and 37 CFR of USPTO. Time will vary rden, should be sent to the DNOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by timated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	he public which minutes to comp omments on the : Trademark Offic S. SEND TO: Co	is to file (and lete, including amount of tim ce, U.S. Depar ommissioner fo	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/727,038	12/04/2003	33082M185	4856		
75	90 12/12/2008	EXAMINER			
Smith, Gambrell & Russell			SELLMAN, CACHET I		
1850 M Street, N.V		ART UNIT	PAPER NUMBER		
Washington, DC 2	0036	1792			

DATE MAILED: 12/12/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 407 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 407 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/727.038 MITSUOKA ET AL. Notice of Allowability Examiner Art Unit CACHET L SELLMAN 1792 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to amendment filed 8/20/2008. The allowed claim(s) is/are 1,8,9,13,20,21,25,26,28-30 and 32. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔯 All b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /William Phillip Fletcher III/ Primary Examiner, Art Unit 1792

Application/Control Number: 10/727,038 Page 2

Art Unit: 1792

DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1, 8, 9, 13, 20-21, 25-26, 28-30, and 32 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: The prior art teaches a process for forming a polar film on a surface of an organic film where the film is formed of silicon, carbon, hydrogen and oxygen; modifying the film to impart an affinity by irradiating with electron beams in a rare gas atmosphere such as argon by exposing the film to a first pressure and imparting an affinity at a second pressure; applying a polar liquid to the surface of the organic film.
- 3. The prior art reference Gallagher et al. provides examples of treating the film using heat where the resulting contact angle is 68°. However, Gallagher et al. fails to teach or show examples of obtaining angles less than. Furthermore Ross does not state how the electron beam treatment changes/ decreases the contact angle of a silsesquioxane film to be below 58°. Therefore the prior art fails to teach treating the film comprises of silicon, carbon, hydrogen and oxygen with electron beams in order to provide the surface with a contact angle of less than 58°.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CACHET I. SELLMAN whose telephone number is Application/Control Number: 10/727,038

Art Unit: 1792

(571)272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman Examiner Art Unit 1792

/C. I. S./ Examiner, Art Unit 1792

/William Phillip Fletcher III/ Primary Examiner, Art Unit 1792